#### **REMARKS**

Claims 1-98 were pending in the application.

Claims 1-20, 24-27, 34-69, 71-80, 82-87, and 89-98 were rejected.

Claims 21-23, 28-33, 70, 81, and 88 were objected to.

Claims 1-3, 8 and 46 have been amended.

Claims 62, 63, 67, 78, and 85 have been canceled.

Claims 99-120 have been added.

Reconsideration and allowance of claims 1-61, 64-66, 68-77, 79-84, and 86-120 is respectfully requested in view of the following.

# The Rejection of Claims 1-3, 65, 67, 68, 71-74, 76, 78, 79, 83, and 86 in view of Abdrakhmanov:

Claims 1-3, 65, 68, 71-74, 76, 79, 83, and 86 were rejected under 35 U.S.C. 102(b) as being anticipated by Abdrakhmanov (US 5,083,608). The Applicant respectfully disagrees.

Abdrakhmanov discloses an arrangement for patching off troublesome zones in a well that includes profile pipes (1) which are radially expanded by pressurizing the interiors of the profile pipes with a fluid and then using an expander (20'). Each of the profile pipes (1) include cylindrical end portions (2) coupled together by intermediate non-cylindrical portions. Abdrakhmanov is <u>completely silent</u> as to the relative burst strengths of the portions of the profile pipes (1).

Claims 1-3, as amended, all require that "the burst strength of the first and second tubular sections is substantially equal to the burst strength of the intermediate tubular section." By contrast, Abdrakhmanov does not disclose or suggest the relative burst strengths of the portions of the profile pipes (1).

Thus, Abdrakhmanov does not disclose or suggest the invention of claim 1.

Furthermore, for at least the same reasons, Abdrakhmanov also does not disclose or \_ suggest the invention of claims 65 and 68 that depend from claim 1.

Thus, Abdrakhmanov also does not disclose or suggest the invention of claim 2.

Furthermore, for at least the same reasons, Abdrakhmanov also does not disclose or suggest the invention of claims 71-74, 76, and 79 that depend from claim 2.

Thus, Abdrakhmanov also does not disclose or suggest the invention of claim 3. Furthermore, for at least the same reasons, Abdrakhmanov also does not disclose or suggest the invention of claims 83 and 86 that depend from claim 3.

Furthermore, claim 71, which depends from claim 2, also requires "<u>upsetting the first and second ends of the tubular member</u>." As disclosed in the specification and drawings (see Fig. 50a) of the present application, the term "upsetting" refers to mechanically working the ends of the tubular member to increase its wall thickness. Abdrakhmanov includes no disclosure or suggestion of this operation. Thus, for these additional reasons, Abdrakhmanov does not disclose or suggest the invention of claim 71.

Furthermore, claim 72, which depends from claim 2, also requires "stress relieving the first and second ends of the tubular member." As disclosed in the specification and drawings of the present application, the term "stress relieving" refers to operating on the ends of the tubular member to decrease stresses within the first and second ends of the tubular member. Abdrakhmanov includes no disclosure or suggestion of this operation. Thus, for these additional reasons, Abdrakhmanov does not disclose or suggest the invention of claim 72.

#### The Rejection of Claims 4-6, 93 and 94 in view of Simpson:

Claims 4-6, 93 and 94 were rejected under 35 U.S.C. 102(e) as being anticipated by Simpson (US 6,457,532). The Applicant respectfully disagrees.

# <u>Simpson is not Prior Art to the Present Application:</u>

The Simpson patent issued on October 1, 2002 based upon a U.S. utility patent application filed on December 22, 1999. The Simpson patent did not claim the benefit of the filing date of a PCT application. Thus, for purposes of 35 U.S.C. 102(e), the prior art date of Simpson is December 12, 1999 – the filing date of the U.S. utility patent application. See 35 U.S.C. § 102(e) and MPEP §§ 706.02(f)(1) and 2136.03.

The present application is the U.S. National Stage application for PCT application serial number PCT/US00/18635, filed on July 7, 2000, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/143,039, filed on July 7, 1999, and U.S. provisional patent application serial number 60/146,203, filed on July 29, 1999.

The present application is also a continuation-in-part of U.S. patent application serial number 09/588,946, attorney docket number 25791.17.02, filed on 6/7/2000, which claimed the benefit of U.S. provisional patent application serial number 60/137,998, filed on 6/7/1999, which was a continuation-in-part of U.S. patent application serial number 09/559,122, attorney docket number 25791.23.02, filed on 4/26/2000, which claimed the benefit of U.S. provisional patent application serial number 60/131,106, filed on 4/26/1999, which was a continuation-in-part of U.S. patent application serial number 09/523,460, attorney docket number 25791.11.02, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/124,042, filed on 3/11/1999, which was a continuation-in-part of U.S. patent application serial number 09/510,913, attorney docket number 25791.7.02, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/121,702, filed on 2/25/1999, which was a continuation-in-part of U.S. patent application serial number 09/502,350, attorney docket number 25791.8.02, filed on February 10, 2000, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/119,611, attorney docket number 25791.8, filed on 2/11/1999, which was a continuation-in-part of U.S. patent application serial number 09/454,139, attorney docket number 25791.3.02, filed on 12/3/1999, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/111,293, filed on 12/7/1998.

Accordingly, the <u>latest possible priority date</u> for the <u>subject matter of the currently</u> pending claims is July 29, 1999 – which is prior to the December 22, 1999 filing date of Simpson. Thus, Simpson is not prior art to any of the claims of the present application.

Thus, the rejection of claims 4-6, 93 and 94 in view of Simpson is improper.

## The Rejection Of Claim 7 in view of Nobileau

Claim 7 was rejected under 35 U.S.C. 102(b) as being anticipated by Nobileau (US 5,794,702). The Applicant respectfully traverses.

Nobileau discloses a method for casing a wellbore in which a casing 15 is radially expanded within a preexisting cased section 11. The cased section 11 is <u>not</u> radially expanded. Thus, the apparatus of Nobileau does not include an expansion mandrel including one or more surfaces <u>for radially expanding first **and** second tubulars</u>.

Thus, contrary to the assertions of the Examiner, at least the following elements are <u>not</u> disclosed in Nobileau:

an expansion mandrel positioned within the first tubular member including one or more outer surfaces for radially expanding the first and second tubular members.

Consequently, the rejection of claim 7 in view of Nobileau is unsupported by the prior art and should be withdrawn. See MPEP § 2131.

## The Rejection of Claims 8-12, 14-20, 26, 27, 89-92 and 95-98 in view of Kinley:

Claims 8-12, 14-20, 26, 27, 89-92 and 95-98 were rejected under 35 U.S.C. 102(b) as being anticipated by Kinley (US 3,191,677). The Applicant respectfully disagrees.

Kinley discloses a method and apparatus for setting liners in tubing that includes the use of multi-piece expander. One example of the Kinley expander includes three segments (29) of a truncated sphere that include diagonally curved end faces (30) that mate with one another (Figs. 4-7). Another example of the Kinley expander includes three segments (35) of a truncated sphere that include vertical end faces (36) and a groove (37) extending around the equator of the segments (Fig. 8). A final example of the Kinley expander includes three segments (38) of a body having a cylindrical portion and a conical end portion (Fig. 9). None of the Kinley expanders: a) are one-piece expanders, b) define spiral grooves, c) define axial grooves, d) include discrete tapered sections, e) include discrete tapered external surfaces whose angles of attack that increase in a continuous manner from one end to the other, f) include paraboloid

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shaped bodies.

Claim 8, as amended, recites: "An expansion cone for expanding a tubular member, comprising:

a <u>one-piece</u> housing including a tapered first end and a second end; one or more grooves defined in the outer surface of the tapered first end; and one or more axial flow passages defined by the housing fluidicly coupled to the circumferential grooves.

By contrast, all of the Kinley expanders are multi-piece. Thus, Kinley does not disclose or suggest the invention of claim 8. Furthermore, for at least the same reasons, Kinley also does not disclose or suggest the invention of claims 9-12, 14-20, 26, and 27, that depend from claim 8.

Furthermore, claim 10, which depends from claim 8, also requires "<u>wherein the grooves comprise spiral grooves</u>." As discussed above, Kinley does not disclose or suggest that any of the Kinley expanders define spiral grooves within their external surfaces. Thus, for these additional reasons, Kinley does not disclose or suggest the invention of claim 10.

Furthermore, claims 12, 14, 15 and 16, which depend from claim 8, also require that "the axial flow passages comprise axial grooves." As discussed above, Kinley does not disclose or suggest that any of the Kinley expanders define axial grooves within their external surfaces. Thus, for these additional reasons, Kinley does not disclose or suggest the invention of claims 12, 14, 15, or 16.

Furthermore, claim 95, which depends from claim 8, also requires "an expansion cone body comprising a plurality of adjacent discrete tapered sections." As discussed above, none of the Kinley expanders include a plurality of adjacent discrete tapered sections. Thus, for these additional reasons, Kinley does not disclose or suggest the invention of claim 95.

Furthermore, claim 96, which depends from claim 95, also requires "wherein the angle of attack of the adjacent discrete tapered sections increases in a continuous manner from one end of the expansion cone body to the opposite end of the expansion cone body." As discussed above, none of the Kinley expanders include a plurality of adjacent discrete tapered sections. Thus, for these additional reasons, Kinley does not

disclose or suggest the invention of claim 96.

Furthermore, claim 97, which depends from claim 8, also requires "<u>wherein the housing comprises</u>: an paraboloid expansion cone body." As discussed above, none of the Kinley expanders include a paraboloid expansion cone body. Thus, for these additional reasons, Kinley does not disclose or suggest the invention of claim 97.

Furthermore, claim 98, which depends from claim 97, also requires "wherein the angle of attack of the outer surface of the paraboloid expansion cone body increases in a continuous manner from one end of the paraboloid expansion cone body to the opposite end of the paraboloid expansion cone body." As discussed above, none of the Kinley expanders include a paraboloid expansion cone body. Thus, for these additional reasons, Kinley does not disclose or suggest the invention of claim 98.

Claim 89 recites: An expansion cone for radially expanding a tubular member, comprising:

an expansion cone body comprising <u>a plurality of adjacent discrete tapered</u> <u>sections</u>.

By contrast, none of the Kinley expanders include a plurality of adjacent discrete tapered sections. Thus, Kinley does not disclose or suggest the invention of claim 89. Furthermore, for at least the same reasons, Kinley also does not disclose or suggest the invention of claim 90, that depends from claim 89.

Furthermore, claim 90, which depends from claim 89, also requires that "the angle of attack of the adjacent discrete tapered sections increases in a continuous manner from one end of the expansion cone body to the opposite end of the expansion cone body." As discussed above, none of the Kinley expanders include a plurality of adjacent discrete tapered sections. Thus, for these additional reasons, Kinley does not disclose or suggest the invention of claim 90.

Claim 91 recites: An expansion cone for radially expanding a tubular member, comprising:

an paraboloid expansion cone body.

By contrast, none of the Kinley expanders include a paraboloid shaped expansion cone body. Thus, Kinley does not disclose or suggest the invention of claim 91. Furthermore, for at least the same reasons, Kinley also does not disclose or

suggest the invention of claim 92, that depends from claim 91.

Furthermore, claim 92, which depends from claim 89, also requires that "the angle of attack of the outer surface of the paraboloid expansion cone body increases in a continuous manner from one end of the paraboloid expansion cone body to the opposite end of the paraboloid expansion cone body." As discussed above, none of the Kinley expanders include a paraboloid shaped expansion cone body. Thus, for these additional reasons, Kinley does not disclose or suggest the invention of claim 92.

#### The Rejection Of Claims 34 and 36-43 in view of Thompson

Claims 34 and 36-43 were rejected under 35 U.S.C. 102(b) as being anticipated by Thompson (US 4,507,019). The Applicant respectfully traverses.

Thompson discloses a method and apparatus for replacing buried pipe that includes a mandrel (140) having a tapered section (148) including boring buttons (92). Passages (168 and 170) extend from the interior of the mandrel (140) to the front portion of the tapered section (148). During operation, the mandrel (140) is displaced through an existing pipeline to remove the pipeline by fracturing the pipeline. During operation, fluids are also forced through the interior of the mandrel (140) and out of the mandrel through the passages (168 and 170) into the leading edge of the interface between the tapered section (148) and the existing pipeline. Thompson does not disclose or suggest: injecting a lubricating fluid into the trailing edge portion of the interface between the tapered section (148) and the existing pipeline; or injecting a lubricating fluid into a plurality of discrete locations along the trailing edge portion of the interface between the tapered section and the existing pipeline.

Thus, contrary to the assertions of the Examiner, at least the following elements are <u>not</u> disclosed in Thompson:

injecting a lubricating fluid into the trailing edge portion; and injecting the lubricating fluid into a plurality of discrete locations along the trailing edge portion.

Consequently, the rejection of claim 34 and 36-43 in view of Thompson is unsupported by the prior art and should be withdrawn. See MPEP § 2131.

# The Rejection Of Claims 46 and 48-54 in view of Thompson

Claims 46 and 48-54 were rejected under 35 U.S.C. 102(b) as being anticipated by Thompson (US 4,507,019). The Applicant respectfully traverses.

Thompson discloses a method and apparatus for replacing buried pipe that includes a mandrel (140) having a tapered section (148) including boring buttons (92). Passages (168 and 170) extend from the interior of the mandrel (140) to the front portion of the tapered section (148). During operation, the mandrel (140) is displaced through an existing pipeline to remove the pipeline by fracturing the pipeline. During operation, fluids are also forced through the interior of the mandrel (140) and out of the mandrel through the passages (168 and 170) into the leading edge of the interface between the tapered section (148) and the existing pipeline. Thompson does not disclose or suggest: injecting a lubricating fluid into the trailing edge portion of the interface between the tapered section (148) and the existing pipeline; or injecting a lubricating fluid into a plurality of discrete locations along the trailing edge portion of the interface between the tapered section and the existing pipeline.

Claim 46, as amended, recites: A method of removing debris formed during the radial expansion of a tubular member by an expansion cone from the interface between the tubular member and the expansion cone, the expansion cone including a first tapered end and a second end, the interface between the tubular member and the first tapered end of the expansion cone includes a leading edge portion and a trailing edge portion, comprising:

injecting a lubricating fluid into the <u>trailing edge portion of the</u> interface between the tubular member and the expansion cone.

By contrast, Thompson does not inject lubricating fluid into the trailing edge portion of the interface between the tapered section (148) and the existing pipeline. Thus, Thompson does not disclose or suggest the invention of claim 46. Furthermore, for at least the same reasons, Thompson also does not disclose or suggest the invention of claims 48-54, that depend from claim 46.

### The Rejection Of Claims 57-61 in view of Shimizu

Claims 57-61 were rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu (US 6,405,761). The Applicant respectfully disagrees.

#### Shimizu is not Prior Art to the Present Application:

The Shimizu patent issued on June 18, 2002 based upon a U.S. utility patent application filed on October 8, 1999. The Shimizu patent did not claim the benefit of the filing date of a PCT application. Thus, for purposes of 35 U.S.C. 102(e), the prior art date of Shimizu is October 8, 1999 – the filing date of the U.S. utility patent application. See 35 U.S.C. § 102(e) and MPEP §§ 706.02(f)(1) and 2136.03.

The present application is the U.S. National Stage application for PCT application serial number PCT/US00/18635, filed on July 7, 2000, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/143,039, filed on July 7, 1999, and U.S. provisional patent application serial number 60/146,203, filed on July 29, 1999.

The present application is also a continuation-in-part of U.S. patent application serial number 09/588,946, attorney docket number 25791.17.02, filed on 6/7/2000, which claimed the benefit of U.S. provisional patent application serial number 60/137,998, filed on 6/7/1999, which was a continuation-in-part of U.S. patent application serial number 09/559,122, attorney docket number 25791.23.02, filed on 4/26/2000, which claimed the benefit of U.S. provisional patent application serial number 60/131,106, filed on 4/26/1999, which was a continuation-in-part of U.S. patent application serial number 09/523,460, attorney docket number 25791.11.02, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/124,042, filed on 3/11/1999, which was a continuation-in-part of U.S. patent application serial number 09/510,913, attorney docket number 25791.7.02, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/121,702, filed on 2/25/1999, which was a continuation-in-part of U.S. patent application serial number 09/502,350, attorney docket number 25791.8.02, filed on February 10, 2000, which claimed the benefit of the filing date of U.S. provisional patent

application serial number 60/119,611, attorney docket number 25791.8, filed on 2/11/1999, which was a continuation-in-part of U.S. patent application serial number 09/454,139, attorney docket number 25791.3.02, filed on 12/3/1999, which claimed the benefit of the filing date of U.S. provisional patent application serial number 60/111,293, filed on 12/7/1998.

Accordingly, the <u>latest possible priority date</u> for the subject matter of the currently pending claims is July 29, 1999 – which is prior to the October 8, 1999 filing date of Shimizu. Thus, Shimizu is not prior art to any of the claims of the present application.

Thus, the rejection of claims 57-61 in view of Shimizu is improper.

# The Rejection of Claims 13, 24, and 25 in view of Kinley:

Claims 13, 24, and 25 were rejected under 35 U.S.C. 103(a) as being obvious in view of Kinley (US 3,191,677). The Applicant respectfully disagrees.

Kinley discloses a method and apparatus for setting liners in tubing that includes the use of multi-piece expander. One example of the Kinley expander includes three segments (29) of a truncated sphere that include diagonally curved end faces (30) that mate with one another (Figs. 4-7). Another example of the Kinley expander includes three segments (35) of a truncated sphere that include vertical end faces (36) and a groove (37) extending around the equator of the segments (Fig. 8). A final example of the Kinley expander includes three segments (38) of a body having a cylindrical portion and a conical end portion (Fig. 9). None of the Kinley expanders: a) are one-piece expanders, b) define spiral grooves, c) define axial grooves, d) include discrete tapered sections, e) include discrete tapered external surfaces whose angles of attack that increase in a continuous manner from one end to the other, f) include paraboloid shaped bodies, g) include optimal dimension for grooves, or h) include spaced apart grooves.

As an initial matter, since claims 13, 24, and 25 depend from claim 8, for at least the reasons above, Kinley also does not disclose or suggest the invention of claims 13, 24, and 25.

Claim 13 requires that "the axial grooves are spaced apart by at least about 3

inches in the circumferential direction." By contrast, Kinley does not disclose or suggest the use of axial grooves, spaced apart axial grooves, or the optimal spacing for such spaced apart axial grooves. The examiner states that such spacing of grooves would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the shape of a prior art device is a design consideration within the skill of the art.

It is **improper** for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being wellknown. See, e.g., In re Ahlert, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of spaces apart grooves on an expansion cone, with the spacing being at least 3 inches apart in the circumferential direction at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of spaces apart grooves on an expansion cone, with the spacing being at least 3 inches apart in the circumferential direction at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible geometric variation. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claim 13, the rejection should be withdrawn. See MPEP § 2131.

Claim 24 requires that "the cross-sectional area of the grooves ranges from about 2X10<sup>-4</sup> in<sup>2</sup> to 5X10<sup>-2</sup> in<sup>2</sup>." By contrast, Kinley does not disclose or suggest the optimal dimensions of grooves. The examiner states that such dimensions of grooves would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size of a prior art device is a design consideration within the skill of the art.

It is **improper** for the Examiner to take Official Notice of facts without

citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of grooves having cross-sectional areas ranging from about 2X10<sup>-4</sup> in<sup>2</sup> to 5X10<sup>-2</sup> in<sup>2</sup> at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of grooves having cross-sectional areas ranging from about 2X10<sup>-4</sup> in<sup>2</sup> to 5X10<sup>-2</sup> in<sup>2</sup> at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible geometric variation. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claim 24, the rejection should be withdrawn.

Claim 25 requires that "the cross-sectional area of the axial flow passages ranges from about 2X10<sup>-4</sup> in<sup>2</sup> to 5X10<sup>-2</sup> in<sup>2</sup>." By contrast, Kinley does not disclose or suggest the optimal dimensions of such flow passages. The examiner states that such dimensions of axial flow passages would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size of a prior art device is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of axial flow passages having cross-sectional areas ranging from about 2X10<sup>-4</sup> in<sup>2</sup> to 5X10<sup>-2</sup> in<sup>2</sup> at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of axial flow

passages having cross-sectional areas ranging from about 2X10<sup>-4</sup> in<sup>2</sup> to 5X10<sup>-2</sup> in<sup>2</sup> at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible geometric variation. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claim 25, the rejection should be withdrawn.

### The Rejection Of Claims 35, 44, 45, 47, 55, and 56 in view of Thompson

Claims 35, 44, 45, 47, 55, 56, and 63 were rejected under 35 U.S.C. 103(a) as being obvious in view of Thompson (US 4,507,019). The Applicant respectfully traverses.

Thompson discloses a method and apparatus for replacing buried pipe that includes a mandrel (140) having a tapered section (148) including boring buttons (92). Passages (168 and 170) extend from the interior of the mandrel (140) to the front portion of the tapered section (148). During operation, the mandrel (140) is displaced through an existing pipeline to remove the pipeline by fracturing the pipeline. During operation, fluids are also forced through the interior of the mandrel (140) and out of the mandrel through the passages (168 and 170) into the leading edge of the interface between the tapered section (148) and the existing pipeline. Thompson does not disclose or suggest: injecting a lubricating fluid into the trailing edge portion of the interface between the tapered section (148) and the existing pipeline; injecting a lubricating fluid into a plurality of discrete locations along the trailing edge portion of the interface between the tapered section and the existing pipeline; the optimal viscosity of the fluids; or the types or combinations of optimal fluids.

As an initial matter, since claims 35, 44, 45, 47, 55, and 56 depend from claims 34 and 46, for at least the reasons above, Thompson also does not disclose or suggest the invention of claims 35, 44, 45, 47, 55, and 56.

Claims 35 and 47 require that "the lubricating fluid has a viscosity ranging from

about 1 to 10,000 centipoise." By contrast, Thompson does not disclose or suggest the optimal range of viscosity for the fluids. The examiner states that the range of optimal viscosity would have been obvious to one having ordinary skill in the art at the time of the invention, since the selection of a known material based upon its suitability for a particular use is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of lubricating fluid having a viscosity ranging from about 1 to 10,000 centipoise for expansion mandrels at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of lubricating fluid having a viscosity ranging from about 1 to 10,000 centipoise for expansion mandrels at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible material. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 35 and 47, the rejection should be withdrawn. See MPEP § 2131.

Claims 44, 45, 55, and 56 require that "the lubricating fluid further includes: TorqTrim III; EP Mudlib; and DrillN-Slid." By contrast, Thompson does not disclose or suggest the optimal types or combinations of fluids. The examiner states that the optimal combination lubricating fluids would have been obvious to one having ordinary skill in the art at the time of the invention, since the selection of a known material based upon its suitability for a particular use is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-

known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of lubricating fluid having TorqTrim III; EP Mudlib; and DrillN-Slid at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the TorqTrim III; EP Mudlib; and DrillN-Slid for expansion mandrels at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible material. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 44, 45, 55, and 56, the rejection should be withdrawn. See MPEP § 2131.

# The Rejection of Claims 64, 66, 69, 75, 77, 80, 82, 84, and 87 in view of Abdrakhmanov:

Claims 64, 66, 69, 75, 77, 80, 82, 84, and 87 were rejected under 35 U.S.C. 103(a) as being obvious in view of Abdrakhmanov (US 5,083,608). The Applicant respectfully disagrees.

Abdrakhmanov discloses an arrangement for patching off troublesome zones in a well that includes profile pipes (1) which are radially expanded by pressurizing the interiors of the profile pipes with a fluid and then using an expander (20'). Each of the profile pipes (1) include cylindrical end portions (2) coupled together by intermediate non-cylindrical portions. Abdrakhmanov is <u>completely silent</u> as to: a) the relative burst strengths of the portions of the profile pipes (1), b) the relative wall thickness of the various sections of the profile pipes.

As an initial matter, since claims 64, 66, 69, 75, 77, 80, 82, 84, and 87 depend from claims 1, 2, and 3, for at least the reasons above, Abdrakhmanov also does not disclose or suggest the invention of claims 35, 44, 45, 47, 55, 56, and 63.

Claims 64 and 82 require that "the wall thicknesses of the first and second

tubular sections is greater than the wall thickness of the intermediate tubular section." By contrast, Abdrakhmanov does not disclose or suggest the optimal relationship between the wall thicknesses of the various portions of the profile pipes (1). The examiner states that the range of optimal relationship between the wall thicknesses of the various portions of the profile pipes (1) would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size of a prior art device is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of an expandable tubular member having the claimed wall thickness relationships at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of an expandable tubular member having the claimed wall thickness relationships at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible variation in relative dimensions. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 64 and 82, the rejection should be withdrawn. See MPEP § 2131.

Claims 66 and 84 require that "the outside diameter of the intermediate tubular section ranges from about 75 percent to about 98 percent of the outside diameters of the first and second tubular sections." By contrast, Abdrakhmanov does not disclose or suggest the optimal relationship between the dimensions of the various portions of the profile pipes (1). The examiner states that the range of optimal relationship between the dimensions of the various portions of the profile pipes (1) would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size

of a prior art device is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of an expandable tubular member having the claimed dimensional relationships at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of an expandable tubular member having the claimed dimensional relationships at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible variation in relative dimensions. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 66 and 84, the rejection should be withdrawn. See MPEP § 2131.

Claims 69 and 87 require that "the ratio of the inside diameters of the first and second tubular sections to the interior diameter of the intermediate tubular section ranges from about 100 to 120 percent." By contrast, Abdrakhmanov does not disclose or suggest the optimal relationship between the dimensions of the various portions of the profile pipes (1). The examiner states that the range of optimal relationship between the dimensions of the various portions of the profile pipes (1) would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size of a pror art device is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of an

expandable tubular member having the claimed dimensional relationships at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of an expandable tubular member having the claimed dimensional relationships at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible variation in relative dimensions. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 69 and 87, the rejection should be withdrawn. See MPEP § 2131.

Claim 75 requires that "the wall thicknesses of the radially expanded first and second ends of the tubular member is greater than the wall thickness of the intermediate portion." By contrast, Abdrakhmanov does not disclose or suggest the optimal relationship between the dimensions of the various portions of the profile pipes (1) following the radial expansion. The examiner states that the range of optimal relationship between the dimensions of the various portions of the profile pipes (1) following the radial expansion would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size of a prior art device is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of an expandable tubular member having the claimed dimensional relationships after a radial expansion at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of an expandable tubular member having the claimed dimensional relationships

after a radial expansion at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible variation in relative dimensions. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 75, the rejection should be withdrawn. See MPEP § 2131.

Claim 77 requires that "the outside diameter of the intermediate portion of the tubular member ranges from about 75 percent to about 98 percent of the outside diameters of the radially expanded first and second ends of the tubular member." By contrast, Abdrakhmanov does not disclose or suggest the optimal relationship between the dimensions of the various portions of the profile pipes (1) following the radial expansion. The examiner states that the range of optimal relationship between the dimensions of the various portions of the profile pipes (1) following the radial expansion would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size of a prior art device is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of an expandable tubular member having the claimed dimensional relationships after a radial expansion at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of an expandable tubular member having the claimed dimensional relationships after a radial expansion at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible variation in relative dimensions. Furthermore, the Examiner's position would also

render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 77, the rejection should be withdrawn. See MPEP § 2131.

Claim 80 requires that "the ratio of the inside diameters of the first and second ends of the tubular member to the interior diameter of the intermediate portion of the tubular member ranges from about 100 to 120 percent." By contrast, Abdrakhmanov does not disclose or suggest the optimal relationship between the dimensions of the various portions of the profile pipes (1). The examiner states that the range of optimal relationship between the dimensions of the various portions of the profile pipes (1) would have been obvious to one having ordinary skill in the art at the time of the invention, since a change in the size of a prior art device is a design consideration within the skill of the art.

It is <u>improper</u> for the Examiner to take Official Notice of facts without citing a single prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. See, e.g., *In re Ahler*t, 424 F.2d at 1091. The Applicant therefore respectfully requests that the Examiner either: 1) demonstrate that the use of an expandable tubular member having the claimed dimensional relationships at the time of the invention is capable of instant and unquestionable demonstration, or 2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to the use of an expandable tubular member having the claimed dimensional relationships at the time of the invention. The Examiner's position, taken to its logical extreme, would render nothing patentable since, eventually, everything can be discovered if one spends enough time trying every possible variation in relative dimensions. Furthermore, the Examiner's position would also render all best mode details provided in a patent application unpatentable.

Thus, there is no factual basis for the rejection of claims 80, the rejection should be withdrawn. See MPEP § 2131.

### Claims 21, 22, 23, 28-33, 70-81, and 88:

Claims 21, 22, 23, 28-33, 70, 81, and 88 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, claims 99-110 present the subject matter of claims 21, 22, 23, 28-33, 70, 81, and 88, respectively, in independent form.

## Claims 111-120:

Claims 111-120 present additional aspects of the invention that are not disclosed or suggested by the prior art of record.

Unless stated otherwise, none of the amendment to the claims were made for reasons substantially related to the statutory requirements for patentability.

Furthermore, unless stated otherwise, the amendment to the claims were made to simply make express what had been implicit in the claims as originally worded and therefore is not a narrowing amendment that would create any type of prosecution history estoppel. In addition, to the extent that the present amendment presents the subject matter of a dependent claim in independent form, such amendment does not in any way alter the scope of the claim, or equivalents thereof.

#### Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the pending claims are drawn to novel subject matter, patentably distinguishable over the prior art of record. The Examiner is therefore respectfully requested to reconsider and allow claims presented for reconsideration herein. To the extent that the present amendment results in additional fees, the Applicant authorizes the Commissioner to charge deposit account no. 08-1394.

S/N 10/030,593

Should the Examiner that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

Todd Mattingly

Registration No. 40,298

Dated: 1/33/04

HAYNES AND BOONE, L.L.P. 901 Main Street, Suite 3100 Dallas, Texas 75202-3789 Telephone: 713/547-2301 Facsimile: 214/200-0853

File: 25791.25.08

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